

O6D

Photoelectric distance sensor



Photoelectric distance sensor O6D



Make it even blacker!

That's what an O6D might say in its working environment.

Because the new photoelectric distance sensor with PMD time-of-flight technology has no trouble detecting jet-black objects. The same applies to highly reflective materials. The O6D detects both at distances of up to 3 metres. This has certain advantages: For example, it can be kept away from harsh environments such as welding cells and still perform its duties reliably. A clear plus in terms of service life.

Further benefits: Thanks to the tried-and-tested O6 design, the sensor is easy to install even in confined spaces. And integration is just as simple via IO-Link. Sounds good?

Would you like to take a closer look at our new O6D?

Click here: ifm.com/cnt/O6D



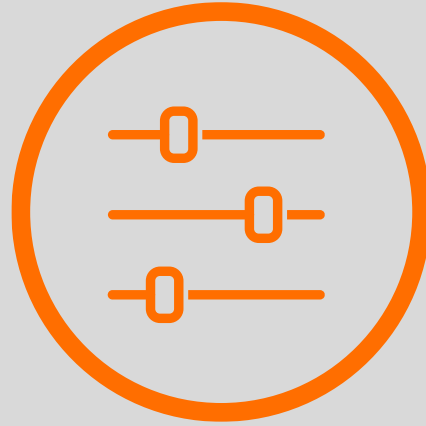
Product advantages

O6D – for good reasons.



Reliable detection of difficult surfaces

The ultimate black mode ensures reliable object detection even with jet-black, shiny or reflective materials.



Versatile operating modes in one device

Three operating modes (fine, standard and fast) in one device for maximum adaptability to different applications.



Flexible installation

Compact design, PMD technology and a range of up to 3 m enable flexible installation.



Easy integration

Intuitive 2-button operation and IO-Link.



Object detection in logistics

Detection of parcels or envelopes

Task

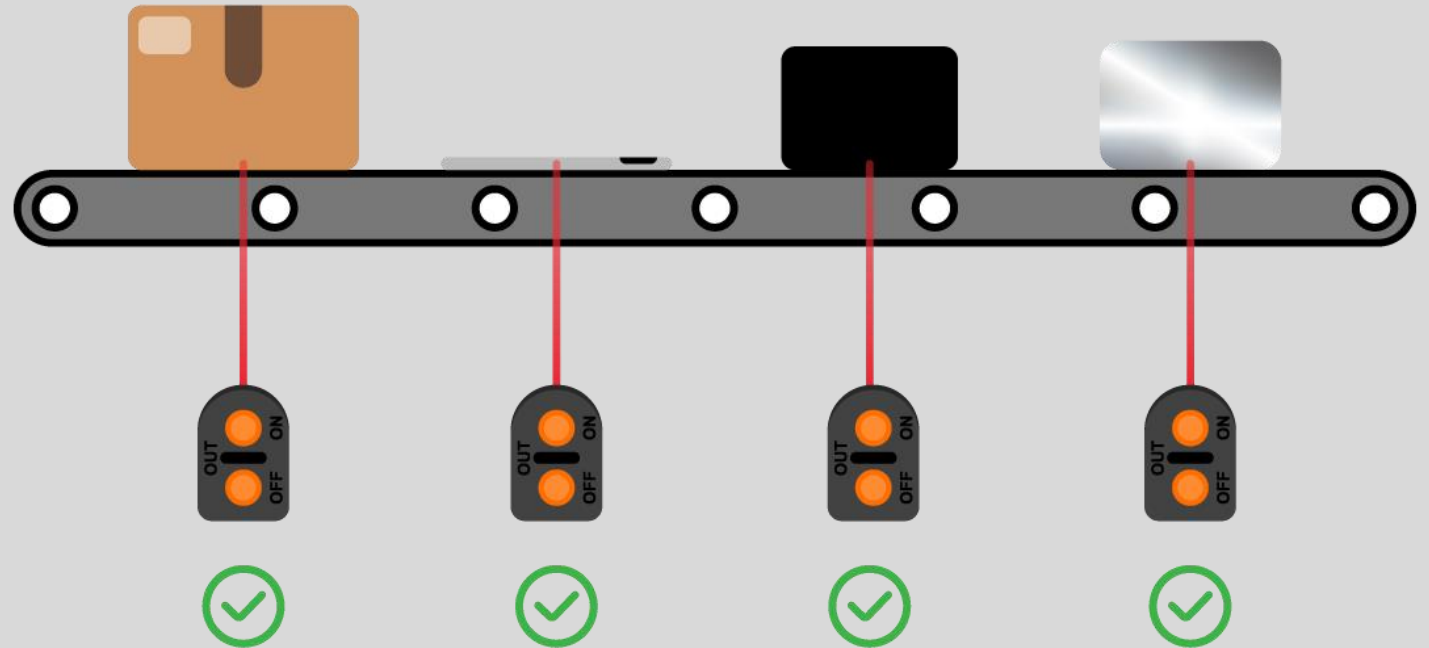
Detection of objects on conveyor belts, e.g. envelopes or parcels.

Challenge

Dark, flat, jet-black or reflective surfaces are often not reliably detected by conventional sensors.

Advantage

Thanks to its ultimate black mode and superior colour independence, the O6D reliably detects jet-black or shiny objects without requiring readjustment.



Presence verification on welding robots

Position detection before the welding process

Task

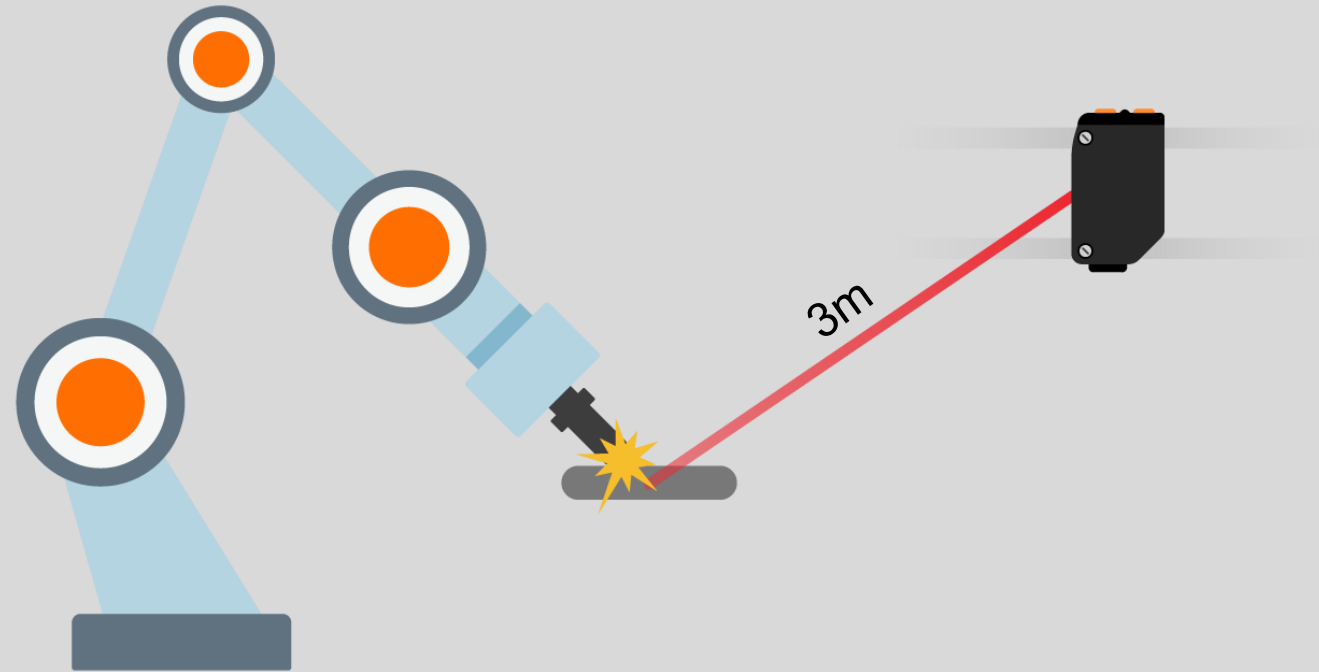
Ensuring that components are correctly positioned in the fixture before the automated welding process starts.

Challenge

Welding cells are characterised by harsh conditions involving heat and weld spatter. High temperatures and weld spatter can damage or interfere with sensors.

Advantage

The range of up to 3 m allows safe installation outside the hazardous area.



Distance detection & control

Motion monitoring of robots

Task

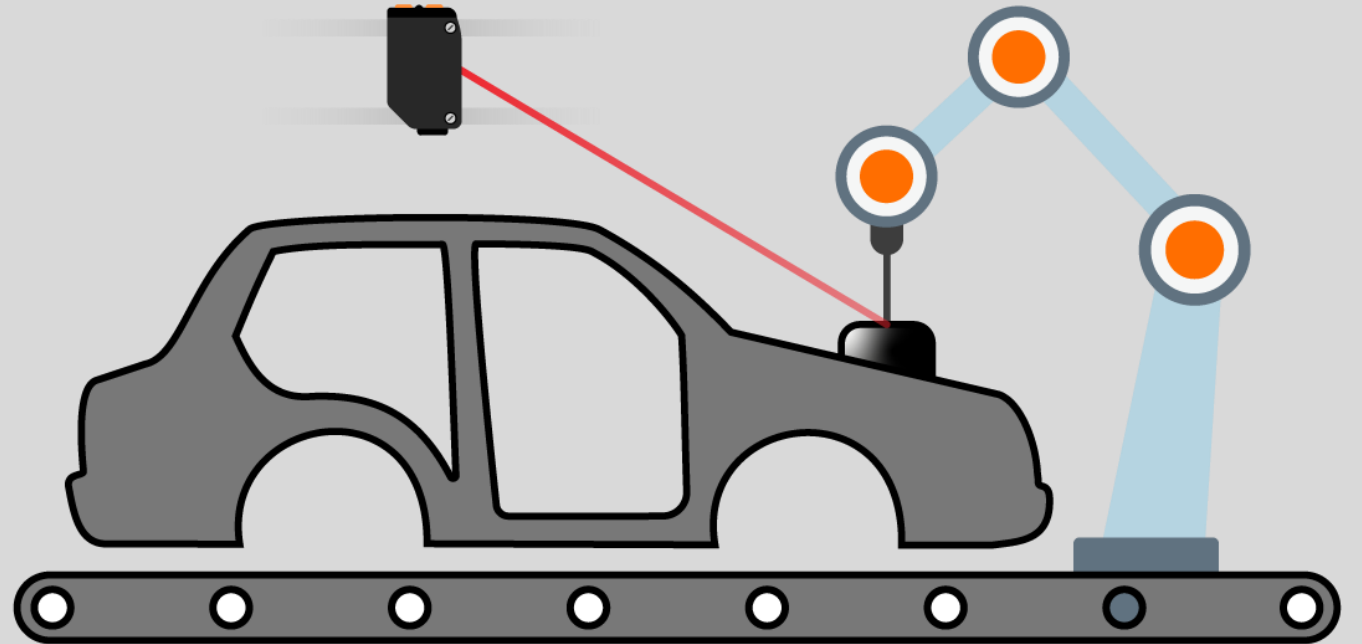
Precise position detection of components in automated assembly processes.

Challenge

In automotive production, many surfaces are jet black or highly reflective. Conventional sensors often provide unreliable signals in such cases, which can lead to incorrect assembly steps.

Advantage

The angle-independent PMD technology enables flexible mounting and reliable detection even with shiny or dark components.



Good to know

The advantages of the O6D at a glance:



Standard design = easy integration

The tried-and-tested O6 design enables quick and uncomplicated integration into existing systems. This means that the sensor can be integrated directly into the system without any additional design work or new accessories.



Intuitive and quick set-up

Operation is carried out using just two buttons – simple, quick and efficient. Although there are only two buttons, both object teach and 2-point teach are possible directly on the sensor.

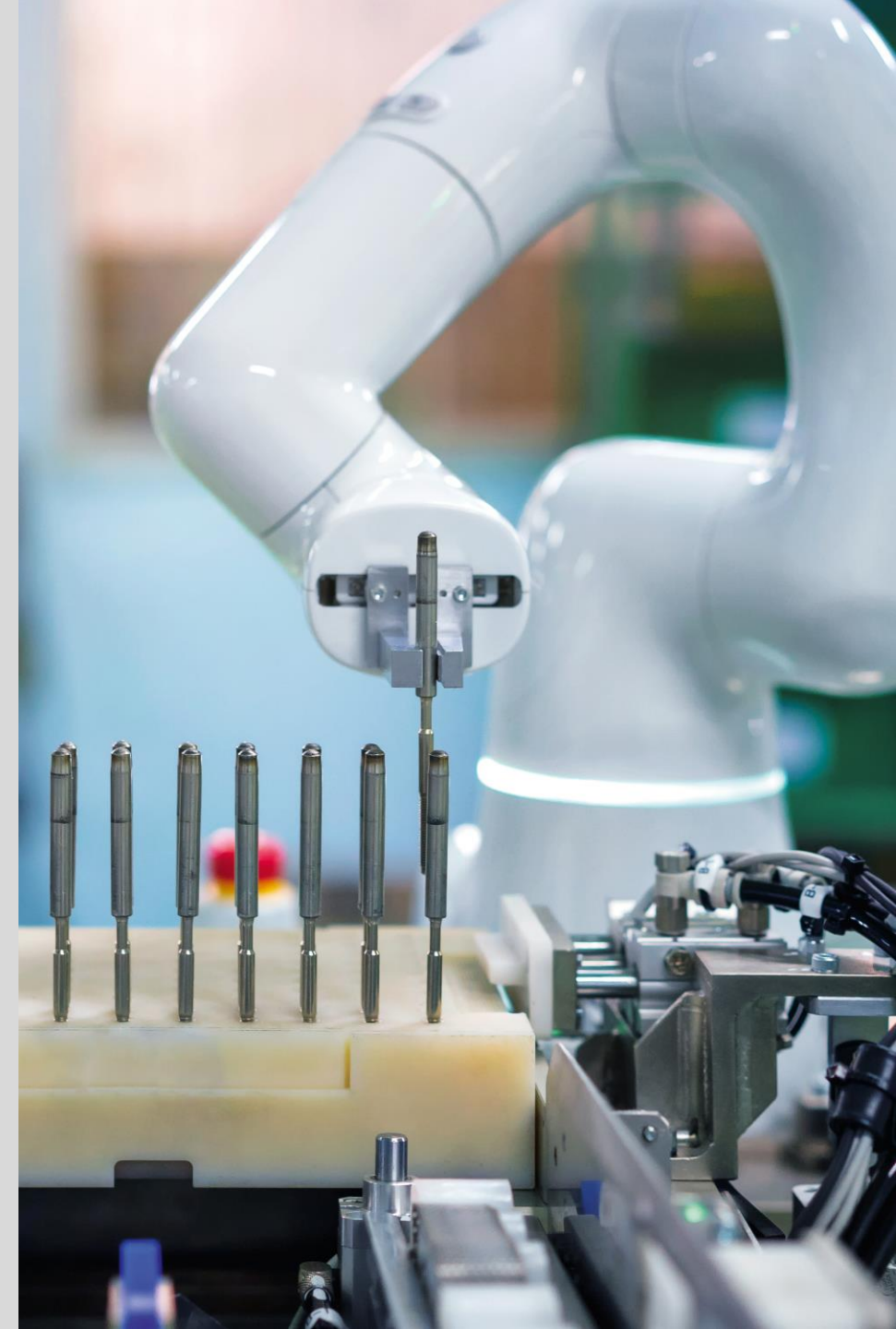


Two process values via IO-Link

The O6D not only provides the distance value via IO-Link, but also the reflectance value of the object. This dual data output offers new possibilities for sorting or inspection processes, for example.



Photoelectric distance sensor O6D
Product presentation



O6D

ifm.com

